

# Auditory Processing Disorder

Usha Patel talks about a little-known disorder that may hinder the school progress of one in ten children.

Auditory Processing Disorder (APD) is a condition where those with normal hearing constantly mishear what is said. It is a listening, rather than a hearing problem, that is neurological in nature. While it may be inherited or caused as a result of developmental problems, research has also shown that early childhood ear infections can be a significant contributory factor in causing it.

Children develop critical language skills between the ages of six months and three years. Language centres within the brain learn to map out sounds and store it for language processing. When a child starts reacting to words with a smile or start speaking its first words, it is effectively associating these sounds with meanings.

If a child suffers from constant middle ear infection during the critical period, then the ability to process language and speech can be affected. Sounds which normally become imprinted in the brain's memory and language centres are not properly established. The mishearing happens because the brain misinterprets aural information. A good example is commonly found when children can't differentiate between "thirteen" and "thirty", for example. While hearing can be perfectly normal their brain just cannot process those sounds accurately.

APD is often difficult to diagnose in children who may have other learning difficulties, which may mask the condition, and the fact that symptoms are common to other conditions such as dyslexia, attention deficit disorder or dyspraxia. It also cannot be established with standard hearing tests and can only be diagnosed using specialist audiology testing.

Children with APD may have trouble understanding spoken messages, remembering information, carrying out directions and reading. They may have low academic performance, need more time to process information and this can lead to behaviour problems. Without proper intervention, those with APD can find it confusing to interpret verbal information. This problem is further exacerbated when in a noisy environment or when there are competing sounds around them. In a class room situation, if the child is not at the front of the class room or paying full attention, distracting sounds can make learning incredibly challenging.

The National Institute of Health suggests ways in which children with APD can be helped. These include environmental modifications to improve classroom acoustics by reducing background noise and sitting the child near the teacher

to check understanding. Auditory memory enhancement, a procedure that reduces detailed information to a more basic representation, may help and informal auditory training techniques can be used by teachers and therapists to address specific difficulties. In addition, exercises to improve language-building skills can increase the ability to learn new words and extend a child's language base.

Information about the disorder can be found on the Auditory Processing Disorder Special Interest Group (APD) Web-page of The British Society of Audiology's website: [www.thebsa.org.uk](http://www.thebsa.org.uk)  
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**The Raviv Practice London** offers a dual approach to help children with APD: First, the Raviv Method, which is one-to-one motor-sensory therapy, is used for auditory memory enhancement. This therapy is neuro-cognitive and lays the foundation skills for learning taking around 20 weeks. This is followed up by a structured language program, FastForWord, which is a computer-based self learning course developed from 25 years of neurophysiological and behavioural research. The program helps with identifying specific auditory processing problems and have tailored exercises to address them. For more information, contact Usha Patel on 07766 837 616 or visit the website: [www.ravivpracticelondon.co.uk](http://www.ravivpracticelondon.co.uk)